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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR                | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|-------------------------------------|-------------------------------|------------------|
| 10/501,232   | 07/12/2004  | Balakrishnan Govindasamy Raghupathy | DAD-0006                      | 3543             |
| 23353  | 7590        | 01/12/2006                          |                               |                  |
| RADER FISHMAN & GRAUER PLLC<br>LION BUILDING<br>1233 20TH STREET N.W., SUITE 501<br>WASHINGTON, DC 20036 |             |                                     | EXAMINER<br>LITHGOW, THOMAS M |                  |
|  |             |                                     | ART UNIT                      | PAPER NUMBER     |
|  |             |                                     | 1724                          |                  |

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/501,232

Applicant(s)

RAGHUPATHY, BALAKRISHNAN  
GOVINDASAMY

Examiner

Thomas M. Lithgow

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application. Specifically, claim 4 recites a "means plus function" statement in the form "means for adjusting.... arm (3)". Applicant is required to identify, specifically what disclosed structure corresponds to this "means plus function" statement.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. . Claim 4 recites “means for adjusting the distance between the screen basket and the debris extraction arm”. However, there appears to be no description in the specification of what this structure is suppose to represent. Clarification and/or correction are required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lynch (US 5587074). Lynch '074 discloses a filter 10 for filtering solid particles from liquid which includes a housing 12, screen basket 26, debris discharge pipe 42, and a rotatable backflush conduit 38 (aka debris extractor arm). The backflush conduit 38 is located “in close proximity” to the interior peripheral surface of the filter element [col. 5, lines

33-35]. A “close proximity” relationship would clearly define an open gap as set forth in claim 1. The curvature toward the screen is best shown by fig. 4 of Lynch ‘074. The “low pressure” is inherent as the pressure inside the filter housing is greater than the pressure in line 42 to drive the back washing effect. This is how this type of backwash device operates. Lynch ‘074 applies to conical screens [col. 1,54], and has a gear box 46 for rotatably driving the backflush conduit 38.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lynch ‘074 alone or further in view of either one of JP 44-006495 or Streander (US 2131002). Based on applicant’s disclosure, if applicant has disclosed a “means for adjusting” then so has Lynch ‘074. In any event, either one of JP ‘495 or Streander ‘002 disclose such a feature on a backwash conduit to render

the gap adjustable to accommodate different concentrations of feed slurry contaminants. To so employ such a feature on Lynch '074 for its intended purpose would have been obvious to one of ordinary skill at the time of the invention.

5. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lynch '074 in view of Muller (US 4867879). Lynch '074 discloses that his filter unit is preferably employed in cooling water circuits in a nuclear reactor [col. 1, 68+].

However, Lynch '074 is silent as to whether his cooling system has a condenser. It is well known that all nuclear reactors involved in power generation employ a condenser to change the phase of the hot steam back to water to be reused in part for reheating in the reactor to generate more steam. In any event, Muller '879 discloses a filter 10 with a condenser to filter the water as it is fed to the condenser 1. The solids may be discharged at 15 or recombined with the water past the condenser. To employ Lynch '074 in such a system would have been obvious to one of ordinary skill.

***Response to Arguments***

6. Applicant's arguments filed 31 Oct 2005 have been fully considered but they are not persuasive. The omission of claim 7 is noted. It has been examined as properly requested by applicant. As Lynch '047 is the only prior art remaining from the art applied to the original claims it is discussed below. Applicant notes col. 6 and reference to fig. 5. The portion of the text relating to the importance of the interior contour is as applicant states, although this appears to be superfluous and not related to the claims. There is no text indicating that the exterior configuration has relatively little effect upon the operation of the filter. Applicant suggests there is no gap as set forth in claim 1. This is addressed in the rejection of claim 1. Applicant has not properly addressed the rejection of claim 4. A request for information under 37 CFR 1.105 is included herein to aid applicant in responding to the rejection of claim 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Lithgow whose telephone number is 571-272-1162. The examiner can normally be reached on Mon. -Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "T.M. Lithgow", with a long, sweeping horizontal line extending to the left.

Thomas M. Lithgow  
Primary Examiner  
Art Unit 1724

TML